

\* FILL IN ALL BLANKS & UTTER.

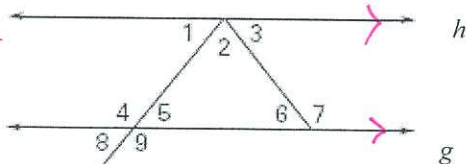
Name: \_\_\_\_\_ TP: \_\_\_\_\_

FORM  
A

HW# 18: Quiz Review Homework  
Due Date: Thursday, October 3rd

1. In the figure below, lines  $h$  and  $g$  are parallel,  $m\angle 9 = 120^\circ$ . Find the measure of  $\angle 1$ . (circle  $\angle 1$ !!)

Label  
in picture



It's a puzzle!

①  $\angle 9$  &  $\angle 4$  are \_\_\_\_\_ angles.

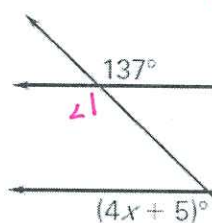
Therefore, they're \_\_\_\_\_.  
(write in  $\angle 4$ ).

②  $\angle 4$  &  $\angle 1$  are \_\_\_\_\_ angles.

Therefore they're \_\_\_\_\_.

③  $\angle 4 + \angle 1 = 180^\circ \rightarrow$  SOLVE

2. In the figure below, lines  $l$  and  $m$  are parallel. Find the value of  $x$ .

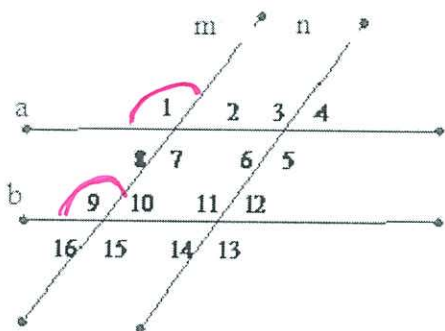


①  $\angle 1$  &  $137^\circ$  are \_\_\_\_\_ angles. Therefore, they are \_\_\_\_\_.  
(write in  $\angle 1$ ).

②  $\angle 1$  &  $(4x + 5)^\circ$  are \_\_\_\_\_ angles. Therefore, they are \_\_\_\_\_.

③ set up your equation & solve!

3. If  $\angle 1 \cong \angle 9$ , then which pairs of lines, if any, must be parallel?



① List all lines that  $\angle 1$  &  $\angle 9$  touch:

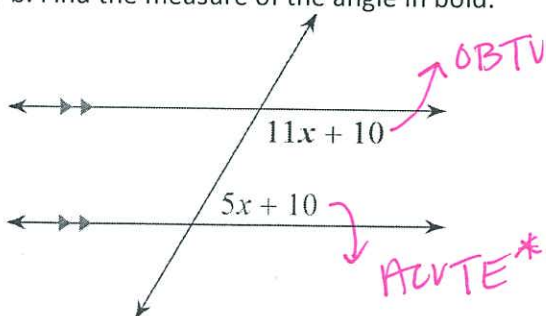
\_\_\_\_\_, \_\_\_\_\_, \_\_\_\_\_

② Which of the lines above are parallel (only 2 of them).

- $a \parallel b$  only
- $m \parallel n$  only
- $a \parallel b$  and  $m \parallel n$
- No lines must be parallel
- Cannot be determined from the given information

4a. What is the angle relationship used to find the value of  $x$ ? \_\_\_\_\_ (2 words)

b. Find the measure of the angle in bold.



Equation that relates  $x$ :

\* Cannot be  $\cong$  because different types of angles.

STAY READY...

5. Let  $A = (1, 4)$ ,  $B = (0, -9)$ ,  $C = (7, 2)$ , and  $D = (6, 9)$ . Prove that angles  $DAB$  and  $DCB$  are the same size. Can anything be said about the angles  $ABC$  and  $ADC$ ? (Mind the GAP with complete sentences!)

**G** GOAL 1:  
GOAL 2:

**R** • Points:  $A =$   $B =$   $C =$   $D =$

**A** \*Use attached graph paper to PLOT  $A, B, C, D$ .  
in a complete sentence... in math, what device  
to we use to measure angles?

**S** \*Use attached graph paper to PLOT  $A, B, C, D$   
\*connect the points with lines!  
① MEASURE the angles formed & record below:  
•  $m\angle DAB =$   
•  
•  
•

**P** what is your proof?

STAY READY...

\*PLOT B, C, & D

• A(1, 4)